TABLE 58. Funds for and companies performing industrial basic research, applied research, and development in the United States, by industry and company size, by source of funds: 2007 (Millions of dollars)

				All industrial R&D	Basic research			
Industry and company size		Companies			Company	· ·		Company
	NAICS codes	(number)	Total	Federal	and other	Total	Federal	and other
All industries	21–23, 31–33, 42, 44–81	43,419	269,267	26,585	242,682	11,269	2,780	8,488
Manufacturing industries	31–33	18,872	187,477	18,170	169,307	9,240	2,227	7,013
Food	311	828	D	D	2,722	D	D	D
Beverage and tobacco products	312	39	217	0	217	3	0	3
Textiles, apparel, and leather	313–16	379	806	10	796	16	D	D
Wood products	321	157	D	D	202	D	0	D
Paper, printing, and support activities	322, 323	797	D	D	2,596	D	0	D
Petroleum and coal products	324	193	D	D	1,718	D	D	D
Chemicals	325	2,445	D	D	55,319	D	D	3,991
Basic chemicals	3251	321	3,234	76	3,158	247	D	D
Resin, synthetic rubber, fibers, and filament	3252	221	963	12	951	91	D	D
Pharmaceuticals and medicines	3254	895	D	D	47,624	D	D	3,432
Other chemicals	other 325	1,008	3,601	14	3,587	226	4	223
Plastics and rubber products	326	1,255	D	D	2,072	D	D	D
Nonmetallic mineral products	327	406	1,125	13	1,112	87	D	D
Primary metals	331	306	896	10	886	46	*	46
Fabricated metal products	332	1,672	1,709	115 i	1,594	D	0	D
Machinery	333	2,711	9,865	69	9,796	70	1	68
Computer and electronic products	334	3,236	58,599	8,838	49,760	2,813	D	D
Computers and peripheral equipment	3341	229	D	D	6,869	D	D	D
Communications equipment	3342	457	11,654	219	11,435	254 i	D	D
Semiconductor and other electronic components	3344	637	18,683	368	18,315	431 i	17	414 i
Navigational, measuring, electromedical, and control instruments	22.45	1 700	20,438	0.17/	12.242	1,929	D	D
	3345	1,798	·	8,176	12,262	•		
Other computer and electronic products	other 334	114	D	D	879	D	D	D
Electrical equipment, appliances, and components	335	788	2,708	90	2,617	54	D	D
Transportation equipment	336	1,265	D	D	30,974	D	D	D
Motor vehicles, trailers, and parts	3361–63	819	D	D	16,034	D	D	D
Aerospace products and parts	3364	242	18,436	5,040	13,397	590	169	422
Other transportation equipment	other 336	203	D	D	1,543	D	D	119
Furniture and related products	337	441	582	1	581	6	0	6
Miscellaneous manufacturing	339	1,954	6,410	66	6,344	225	4	221
Medical equipment and supplies	3391	969	5,176	60	5,116	193	D	D
Other miscellaneous manufacturing	other 339	985	1,234	6	1,228	32	D	D

TABLE 58. Funds for and companies performing industrial basic research, applied research, and development in the United States, by industry and company size, by source of funds: 2007 (Millions of dollars)

				All industrial R&D		Basic research		
ndustry and company size	NAICS codes	Companies (number)	Total	Federal	Company and other	Total	Federal	Company and other
Nonmanufacturing industries	21-23, 42, 44-81	24,547	81,790	8,415	73,375	2,029	554	1,475
Mining, extraction, and support activities	21	216	1,445	9	1,436	36	0	36
Utilities	22	43	235	35	200	4	D	D
Construction	23	538	D	D	386	D	D	D
Wholesale trade	42	3,648	2,294	16	2,277	39	D	D
Retail trade	44, 45	1,587	2,530	12	2,517	7	0	7
Transportation and warehousing	48, 49	281	D	D	166	D	0	D
Information	51	2,423	D	D	28,767	D	D	D
Publishing	511	1,408	20,900	22	20,878	57	D	D
Newspaper, periodical, book, and directory	5111	104	D	D	1,245	D	0	D
Software	5112	1,305	D	D	19,634	D	D	53
Telecommunications	517	237	D	D	3,107	D	0	D
Wired and wireless (except satellite)								
telecommunications carriers	5171, 5172	98	D	D	2,320	D	0	D
Satellite telecommunications	5174	4	D	0	D	0	0	0
Other telecommunications	other 517	135	D	0	D	D	0	D
Internet service providers, Web search portals,								
and data-processing services	518	562	D	D	4,190	D	0	D
Internet service providers and Web search portals	5181	172	2,351	0	2,351	D	0	D
Data-processing, hosting, and related services	5182	390	D	D	1,838	D	0	D
Other information	other 51	216	593	0	593	3	0	3
Finance, insurance, and real estate	52, 53	331	2,021	0	2,021	40	0	40
Professional, scientific, and technical services	54	11,146	40,533	7,608	32,924	1,546	540	1,006
Architectural, engineering, and related services	5413	1,996	5,882	1,885	3,997	223	180	44
Computer systems design and related services	5415	4,252	14,407	804	13,603	469	131	338
Scientific R&D services	5417	1,851	16,849	4,831	12,017	642	216	426
Other professional, scientific, and technical services	other 54	3,047	3,394	87	3,307	213	14	199
Health care services	621–23	2,849	1,280	7	1,274	144	D	D
Other nonmanufacturing ^a	55, 56, 61, 624, 71, 72, 81	1,484	1,857	450	1,406	13	D	D

TABLE 58. Funds for and companies performing industrial basic research, applied research, and development in the United States, by industry and company size, by source of funds: 2007 (Millions of dollars)

Industry and company size				All industrial R&D		Basic research		
	NAICS codes	Companies (number)	Total	Federal	Company and other	Total	Federal	Company and other
Company size (employees)								
All companies	-	43,419	269,267	26,585	242,682	11,269	2,780	8,488
5–24	-	21,701	10,854	1,671	9,183	460	88	373
25–49	-	6,852	7,884	615	7,269	267	71	196
50–99	-	5,960	10,068	760	9,308	458	123	335
100–249	-	4,309	13,354	1,264	12,090	526	177	349
250-499	-	1,809	8,258	556	7,702	187	15 i	172
500–999	-	1,275	14,279	662	13,617	493	90	403
1,000–4,999	-	1,039	41,103	1,287	39,816	1,165	25	1,140
5,000-9,999	-	211	22,673	1,516	21,157	719 i	131	589 i
10,000–24,999	-	158	45,946	1,930	44,016	2,995	373	2,622
25,000 or more	-	106	94,848	16,325	78,523	3,999	1,688	2,311

TABLE 58. Funds for and companies performing industrial basic research, applied research, and development in the United States, by industry and company size, by source of funds: 2007 (Millions of dollars)

			Applied research		Development			
	_			Company			Company	
Industry and company size	NAICS codes	Total	Federal	and other	Total	Federal	and other	
All industries	21-23, 31-33, 42, 44-81	57,569	8,945	48,625	200,430	14,861	185,569	
Manufacturing industries	31–33	39,502	4,791	34,711	138,736	11,152	127,584	
Food	311	554	D	D	2,016	0	2,016	
Beverage and tobacco products	312	93	0	93	121	0	121	
Textiles, apparel, and leather	313–16	45	D	D	745	D	D	
Wood products	321	D	0	D	D	D	D	
Paper, printing, and support activities	322, 323	D	0	D	2,155	D	D	
Petroleum and coal products	324	D	*	D	D	1	D	
Chemicals	325	12,746	246	12,500	38,918	90	38,828	
Basic chemicals	3251	1,313	D	D	1,674	26	1,647	
Resin, synthetic rubber, fibers, and filament	3252	412	D	D	460	10	451	
Pharmaceuticals and medicines	3254	9,880	193	9,687	34,550	46	34,504	
Other chemicals	other 325	1,141	3	1,138	2,234	8	2,226	
Plastics and rubber products	326	D	D	D	1,640	D	D	
Nonmetallic mineral products	327	392	D	D	647	D	D	
Primary metals	331	320	0	320	530	10	520	
Fabricated metal products	332	D	D	D	1,361	D	D	
Machinery	333	1,527	28	1,499	8,268	39	8,229	
Computer and electronic products	334	13,203	1,812	11,391	42,582	D	D	
Computers and peripheral equipment	3341	887 i	D	D	5,912	D	D	
Communications equipment	3342	2,797	D	D	8,604 i	63	8,540 i	
Semiconductor and other electronic components	3344	4,869	65	4,805	13,383	287	13,097	
Navigational, measuring, electromedical,								
and control instruments	3345	4,543	1,567	2,976	13,966	D	D	
Other computer and electronic products	other 334	107	D	D	717	D	D	
Electrical equipment, appliances, and components	335	508	D	D	2,146	84	2,061	
Transportation equipment	336	6,202	2,596	3,605	31,949	D	D	
Motor vehicles, trailers, and parts	3361–63	D	D	D	13,977	D	D	
Aerospace products and parts	3364	3,989	2,502	1,487	13,857	2,369	11,488	
Other transportation equipment	other 336	D	D	D	4,116	D	D	
Furniture and related products	337	115	*	114	461	1	461	
Miscellaneous manufacturing	339	1,346	42	1,304	4,839	21	4,819	
Medical equipment and supplies	3391	1,186	D	D	3,798	18	3,779	
Other miscellaneous manufacturing	other 339	160	D	D	1,042	2	1,039	

TABLE 58. Funds for and companies performing industrial basic research, applied research, and development in the United States, by industry and company size, by source of funds: 2007 (Millions of dollars)

			Applied research			Development	
industry and company size	NAICS codes	Total	Federal	Company and other	Total	Federal	Company and other
Nonmanufacturing industries	21–23, 42, 44–81	18,067	4,153	13,914	61,693	3,708	57,985
Mining, extraction, and support activities	21	455	0	455	953	9	944
Utilities	22	53	D	D	177	D	D
Construction	23	D	D	D	262	0	262
Wholesale trade	42	341	D	D	1,913	D	D
Retail trade	44, 45	398	12	386	2,124	0	2,124
Transportation and warehousing	48, 49	D	D	D	140	0	140
Information	51	D	D	3,098	25,760	D	D
Publishing	511	2,392	D	D	18,451	D	D
Newspaper, periodical, book, and directory	5111	D	D	D	D	0	D
Software	5112	D	D	2,355	D	D	17,225
Telecommunications	517	145	0	145	D	D	D
Wired and wireless (except satellite)							
telecommunications carriers	5171, 5172	D	0	D	D	D	D
Satellite telecommunications	5174	D	0	D	D	0	D
Other telecommunications	other 517	D	0	D	745	0	745
Internet service providers, Web search portals,							
and data-processing services	518	D	D	D	4,022	D	D
Internet service providers and Web search portals	5181	D	0	D	2,317	0	2,317
Data-processing, hosting, and related services	5182	D	D	D	1,705	D	D
Other information	other 51	D	0	D	D	0	D
Finance, insurance, and real estate	52, 53	155	0	155	1,826	0	1,826
Professional, scientific, and technical services	54	12,837	4,097	8,740	26,150	2,970	23,179
Architectural, engineering, and related services	5413	1,085	339	745	4,575	1,367	3,208
Computer systems design and related services	5415	1,435	284	1,151	12,503	389	12,114
Scientific R&D services	5417	8,590	3,463	5,127	7,617	1,152	6,464
Other professional, scientific, and technical services	other 54	1,727	11	1,716	1,455	62	1,392
Health care services	621–23	504	D	D	632	2	630
Other nonmanufacturing ^a	55, 56, 61, 624, 71, 72, 81	87	D	D	1,757	D	D

TABLE 58. Funds for and companies performing industrial basic research, applied research, and development in the United States, by industry and company size, by source of funds: 2007 (Millions of dollars)

Industry and company size			Applied research			Development	
	NAICS codes	Total	Federal	Company and other	Total	Federal	Company and other
Company size (employees)							
All companies	-	57,569	8,945	48,625	200,430	14,861	185,569
5–24	-	3,083	598	2,485	7,311	985	6,326
25–49	-	2,210	280	1,929	5,408	263	5,144
50–99	-	3,791	357	3,434	5,819	280	5,539
100–249	-	3,094	272	2,822	9,734	814	8,920
250-499	-	1,721	184	1,537	6,350	358	5,993
500-999	-	3,703	271	3,431	10,083	301	9,783
1,000–4,999	-	8,637	658	7,979	31,301	604	30,697
5,000-9,999	-	5,160	333	4,827	16,793	1,053	15,741
10,000–24,999	-	10,043	473	9,570	32,908	1,084 i	31,823
25,000 or more	-	16,127	5,518	10,609	74,723	9,119	65,604

^{* =} amount < \$500,000; D = suppressed to avoid disclosure of confidential information; i = more than 50% of the value is imputed; - = not applicable.

NOTES: Detail does not add to total due to rounding or suppression. The method used to assign industry classifications has changed; industry-specific estimates are not directly comparable with those for years prior to 2004. Excludes federally funded research and development centers. During statistical processing, when R&D was not allocated among the three character-of-work categories (basic research, applied research, and development) by survey respondents, algorithms were used to do the allocation. See table A-7 for the amount of undistributed R&D and the number of companies that reported R&D in each category. The R&D in this table is the industrial R&D performed within company facilities funded from all sources. The funds are the company's own; funds from outside organizations, such as other companies, research institutions, universities and colleges, nonprofit organizations, and state governments; and funds from the federal government. Excludes R&D performed outside of the company (e.g., R&D performed by other organizations) and R&D performed outside of the 50 U.S. states and DC (e.g., R&D not performed on U.S. soil by foreign subsidiaries or other foreign organizations). For definitions and more information about year-to-year comparability of the statistics, see technical notes and survey methodology.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Industrial Research and Development: 2007.

^a Estimates for management of companies and enterprises (NAICS 55), formerly shown separately, now are included in other nonmanufacturing.